

JOSEPH HENRY.

Born, December 17, 1799.

Died, May 13, 1878.

# UNVEILING THE STATUE OF JOSEPH HENRY.

(SMITHSONIAN GROUNDS.)

THURSDAY, APRIL 19, 1883.

### ORDER.

THE PRESIDENT OF THE UNITED STATES.

THE CHIEF JUSTICE OF THE UNITED STATES, Chancellor of the Institution.

THE ORATOR OF THE DAY. President NOAH PORTER, of Yale College.

THE CHAPLAIN OF THE DAY. Rev. Dr. A. A. HODGE.

THE FAMILY OF PROFESSOR HENRY.

#### THE ESTABLISHMENT OF THE SMITHSONIAN INSTITUTION, VIZ:

THE VICE PRESIDENT.

SECRETARY OF STATE

SECRETARY OF THE TREASURY.

SECRETARY OF WAR.

SECRETARY OF THE NAVY. SECRETARY OF THE INTERIOR.

POSTMASTER GENERAL.

ATTORNEY GENERAL.

COMMISSIONER OF PATENTS.

The Regents and Secretary of the Smithsonian Institution and Ex-Regents. The Joint Committee of the Senate and House of Representatives, appointed to represent Congress.

The Diplomatic Corps.

The Associate Justices of the Supreme Court of the United States.

Judges of United States Courts.

Claims Commissions.

Judges of the Supreme Court of the District of Columbia.

Senators and Members of the House of Representatives.

Commissioners of the District of Columbia.

The General and Officers of the Army.

The Admiral and Officers of the Navy.

Ex-members of the Cabinet and Ex-ministers of the United States.

National Academy of Sciences.

Founders of the Henry Trust Fund for Science.

The Commissioner of Agriculture.

The Assistant Secretaries of Departments. Solicitor General and Assistant Attorneys General.

The United States Marshal and Officers of Courts.

The Light House Board.

The Heads of Bureaus.

- The Superintendent of the Coast Survey, the Superintendent of the Naval Observatory, the Superintendent of the Nautical Almanac, the Director of the Geological Survey, and the Librarian of Congress.
- The Commissioner of Public Buildings, the Architect of the Capitol, the Superintendent of the Government Printing Office, the Superintendent of the Botanical Gardens, and the Visitors of the Government Hospital for the Insane.

Officers of the Senate and House of Representatives.

Trustees of the Corcoran Gallery of Art.

The Washington Monument Society.

Officers and Employés of the Smithsonian Institution, Bureau of Ethnology, National Museum, and U. S. Fish Commission.

Alumni of the College of New Jersey.

Members of Scientific Organizations, etc., etc.

# ORDER OF EXERCISES.

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During the procession of invited guests from the National Museum to the platform, the Marine Band will play Grand March—" Transit of Venus" . J. P. Sousa Music-Marine Band, "The Hallelujah Chorus." . Händel (Messiah.) J. P. SOUSA, Conductor. II. PRAYER . . . Rev. A. A. Hodge, D. D. Of Princeton, N. J. . . . . . Chief Justice Waite III. Address . Chancellor of the Institution. UNVEILING THE STATUE. IV. V. Music-Grand Chorus, "The Heavens are Telling." Haydn (CREATION.) PHILHARMONIC SOCIETY and FULL MARINE BAND. R. C. BERNAYS, Conductor. VI. ORATION . . Rev. Dr. Noah Porter President of Yale College. VII. Music—Grand March Triumphale, "Schiller," Meyerbeer

The Philharmonic Society will be assisted by Members from the Washington Operatic Association, the Rossini and C. C. Choral Societies, the Washington Sængerbund and Germania Mænnerchor.

J. P. SOUSA, Conductor.

Prof. F. WIDDOWS, FRANK WILSON, and M. KOECHLING.
Special Committee on Music.

The Ceremonies will be under the charge of Gen. O. M. POE, U. S. A.

## JOSEPH HENRY

was born in Albany, N. Y., December 17, 1799. At the age of sixteen young Henry devoted himself with resolute purpose to the pursuit of science. On completing his school studies at the Albany Academy, he commenced his career as a civil engineer. In 1826 (at the age of twenty-seven) he was elected to the professorship of mathematics and natural philosophy in the Albany Academy. He here commenced the series of electrical researches which have had so large an influence in all the subsequent developments and applications of this wonderful agent. In 1827, he published his first memoir on improvements in the power of electro-magnetic apparatus by means of a great increase in the number of coils. In 2828 and 1829 he exhibited before the Albany Institute, electro-magnets many times more powerful than any previously constructed.

Henry was the first inventor (1828) of the "speol-wound" magnet, capable of being actuated through a long conducting wire at great distances. He first devised and operated an electro-magnetic telegraph with a bell signal, (1830, 1831,) at Albany, through the circuit of a mile of copper wire. He first invented the electro-magnetic engine, (1831,) employing the first automatic commutator or pole-changer. He first discovered (1832) the self-induction of an electrical current on passing through a long conductor. He first devised (1835) a compound telegraphic circuit, by which the primary circuit, enfeebled by distant action, may control a local secondary circuit of great power. He first discovered (1838) the successive orders of electrical induction in a series of closed circuits. He first discovered (1842) the oscillating character of an electrical discharge. He first showed by the thermo-galvanometer (1845) that the solar spots radiate less heat than the surrounding photosphere. He first established (through the agency of the Smithsonian Institution, 1849) a system of simultaneous meteorological observations, by telegraph, the results of which were daily plotted on a map and weather forecasts made from them.

Henry was elected, in 1832, professor of natural philosophy in Princeton college; in 1846, the first Secretary of the Smithsonian Institution; in 1868, President of the National Academy of Sciences; in 1871, the first President of the Philosophical Society of Washington; in the same year, Chairman of the United States Light-House Board, of which body he had been a member from its reorganization in 1852. In the latter capacity he was influential in greatly improving this important branch of the public service, by the introduction upon our coasts of the Fresnel system of light-house illumination, by original researches developing largely the illuminating power of lard oil, by prolonged investigations in determining the character of acoustic refraction, and by greatly increasing the efficiency of fog-signalling.

These various positions were held by him until his death, which occurred in Washington, May 13, 1878. He was buried at Oak Hill Cemetery May 16, 1878.

Professor Henry made important contributions to science in electricity, electromagnetism, meteorology, capillarity, acoustics, and in other branches of physics; he published valuable memoirs in the transactions of various learned societies of which he was a member; and devoted thirty-two years of his life to making the Smithsonian Institution what its founder intended it to be, an efficient instrument "for the increase and diffusion of knowledge among men."

In recognition of his distinguished services—as well in the public interest as in the advancement of science—memorial services in his honor were held by Congress, January 16, 1879, in the Hall of the House of Representatives.

By act of Congress approved June 1, 1880, the Regents of the Smithsonian Institution were authorized to erect on the grounds of the Institution "a statue in bronze of Josephs Henry." This statue was executed by the American sculptor William W. Story, at Rome, in 1882; and is erected and unveiled this 19th day of April, 1883.